

USER MANUAL

QSM-60V

PRE-Mixer AMPLIFIER



1. Security Precautions

- ◎ Carefully to **READ** the instruction in this manual before use.
- ◎ Certainly to **OBSERVE the INSTRUCTION** in this manual regard convention of safety symbols and messages
- ◎ Please **KEEP** this user **MANUAL** nearby for anytime reference.

Safety symbol and Message Conventions

Below-described safety symbol and messages are to prevent bodily injury and property damage. Before operating the amplifier, read this manual first so you completely knowing the potential safety hazard and understanding the meaning of the safety symbols and messages.

 WARNING	Indicates a potentially hazardous situation, which, if mishandled, could result in death or serious body injury, and/or property damage.
 CAUTION	Indicates a potentially hazardous situation, which, if mishandled, could result in moderate or minor body injury, and/or property damage.



■ When Installing the Amplifier

- **DO NOT** installing or mounting the amplifier in unstable locations, such as on the rickety table or the slanted surface. It may result in the amplifier falling down and causing body injury and/or property damage.
- **Be sure to ground** to the safety ground (earth) terminal to avoid electric shock. Never to ground to a gas pipe for tragic disaster may occur.
- Use the amplifier only with the voltage specified on the amplifier. Using the voltage higher than specified may cause fire or electric shock.
- **DO NOT** cut, twist, damage, nor modify the power supply cord. In addition, avoid using the power cord close to heaters, and don't place heavy object, including the amplifier itself, on the power cord, for it may cause fire or electric shock.
- **DO NOT** expose the amplifier to rain or the environment where it may be splashed by water or other liquids, for doing so, it may cause fire or electric shock.

■ When using the Amplifier

- When found following irregular situation during amplifier is in use, immediately switch off the power, disconnect the power supply plug from the AC outlet. Don't try to operate the amplifier again. Contact your local dealer to check the amplifier.
 - ✓ The amplifier falls.
 - ✓ Amplifier is malfunction.
 - ✓ Water or any metallic object gets into the amplifier.
 - ✓ The smoke or strange smell coming from the amplifier.
 - ✓ The power supply cord is damaged, such as exposure of the core, disconnection etc..
- **DO NOT** put cups, bowls, or other containers with liquid or metallic object in it on the top of the amplifier. If they spill accidentally into the amplifier, it may result in fire or electric shock.
- **DO NOT** touch the power supply plug during thundering and lightning, for it may result in electric shock.
- **DO NOT** insert or drop the metallic objects or flammable materials into the ventilation slots of the amplifier, for it may result in fire or electric shock.
- **DO NOT** open nor remove the amplifier cover to prevent fire or electric shock, for there are high voltage components inside the amplifier.



■ When Installing the Amplifier

- **DO NOT** remove nor plug in the power supply plug with wet hands, for it may cause electric shock.
- When unplug the power supply cord, be sure to grasp the power supply plug. **DO NOT** pull on the cord itself. Operating the amplifier with damaged power supply cord may cause fire or electric shock.
- **Avoid** installing the amplifier in humid or dusty places, the area exposed to the direct sunlight, locations generating smoke or steam, or the spot near the heaters. It may result in fire or electric shock.
- When moving the amplifier, be sure to remove its power supply cord from the wall outlet. Moving the amplifier with the power cord connected to the outlet may cause damage to the power cord, and resulting in fire or electric shock. When removing the power cord, be sure to grasp its plug to pull.
- **DO NOT** block the ventilation slots of the amplifier chassis. It will cause the temperature rising and result in fire.

■ When Using the Amplifier

- Make sure that the volume control is turned to minimum position before power is switched on. Loud sound produced at high volume when power is switched on may impair hearing.
- **DO NOT** place heavy objects on the amplifier, for it may cause it fall and may result in body injury and/or property damage. Besides, the object itself may cause damaged or body injury.
- **DO NOT** operate the amplifier for the extended period of time with the sound distorting. It is an indication of malfunction, which can cause heat and result in fire.
- Switch the power off, and unplug the power supply plug from the AC outlet for safety purposes, when cleaning or leaving the amplifier unused for 7 days or more. Fire or electric shock may occur.
- If the dust accumulates on the power supply plug or in the wall AC outlet, fire may result in. Clean it periodically. In addition, make sure the plug is inserted in the wall outlet securely.
- Contact your local dealer to clean the dust, if the dust has accumulated in the amplifier for a long period of time. Dust accumulation may result in fire or damage.

2. Description

QSM-60V is a versatile and convenient Pre-mixer Amplifier. It accepts 11 input sources covering 5 MIC, 3 AUX, CD, Tuner, and Chime input.

Signal from MIC 1, MIC 2, and Chime will activate mute function, which will mute the signal from other channels. The mute priority is Chime, MIC 1, and MIC 2.

It employs high performance circuit, that makes its S/N ratio is better than 65dB and less than 0.1% of THD.

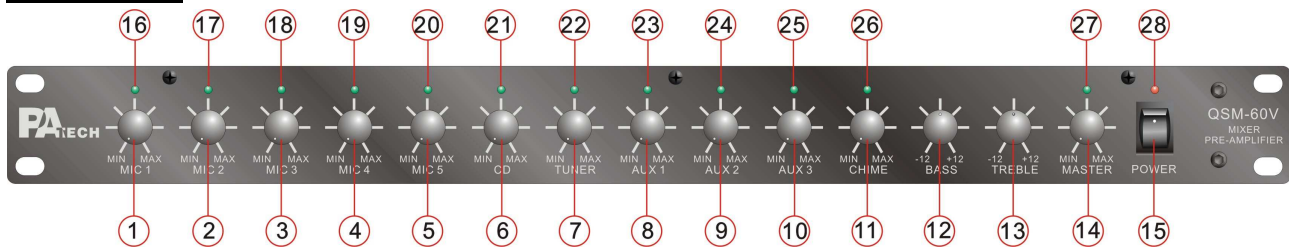
Besides AC power source, QSM-60V has DC 24V input power screw connector as backup power source.

On the front panel, above each volume control, LED lights green to indicate input signal source; and when the signal is over, it will light red.

QSM-60V is the ideal and convenient pre-mixer amplifier for multi-input source application.

3. Panel Description

Front Panel



1. MIC 1 Volume Control	11. CHIME Volume Control	21. CD LED Indicator
2. MIC 2 Volume Control	12. BASS Control	22. Tuner LED Indicator
3. MIC 3 Volume Control	13. TREBLE Control	23. AUX 1 LED Indicator
4. MIC 4 Volume Control	14. MASTER Volume Control	24. AUX 2 LED Indicator
5. MIC 5 Volume Control	15. Power On / Off switch	25. AUX 3 LED Indicator
6. CD Volume Control	16. MIC 1 LED Indicator	26. Chime LED Indicator
7. TUNER Volume Control	17. MIC 2 LED Indicator	27. Volume LED Indicator
8. AUX 1 Volume Control	18. MIC 3 LED Indicator	28. Power On LED Indicator
9. AUX 2 Volume Control	19. MIC 4 LED Indicator	
10. AUX 3 Volume Control	20. MIC 5 LED Indicator	

Rear Panel



1. Mains Power Input Socket	13. TUNER input
2. Power Fuse (for AC)	14. CD input
3. Earth Connection Screw	15. MIC 5 Phantom Power Switch
4. AC Voltage selection screw	16. MIC 5 input
5. DC Power Supply Terminals	17. MIC 4 Phantom Power Switch
6. Line Out (XLR)	18. MIC 4 input
7. Line Out	19. MIC 3 Phantom Power Switch
8. REC output	20. MIC 3 input
9. CHIME input	21. MIC 2 Phantom Power Switch
10. AUX 3 input	22. MIC 2 input
11. AUX 2 input	23. MIC 1 Phantom Power Switch
12. AUX 1 input	24. MIC 1 input

4. Features

- 11 input channels: MIC x 5, AUX x 3, CD, Tuner, and Chime.
- Up to 3 mute priorities: Chime, MIC 1, MIC 2.
- 2 power sources: AC 230/115V 50/60Hz and DC 24V.
- 2-color LED indicator for each input signal. Green is normal input, red is clipping.
- Master volume, Bass, and Treble control for the output.
- Record output
- 1U height
- 19" rack.

5. Power Source

● AC Power Source

The supply transformer has been designed for use AC 115V/230V($\pm 10\%$) 60/50 Hz. Use Voltage selection screw switch to select the voltage you want.

● DC Power Source

Battery Connection (24Vdc)

When using external batteries, ground the amplifier via the screw terminal. (Electrical stability of the system will be improved by providing a good earth ground.) When connecting batteries, please ensure correct polarity.

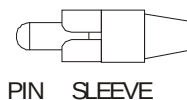
6. Connection

● Microphone Connection

Mic1~5 inputs are XLR jack.

● CD, Aux, Tuner, and Chime Connection (Input)

CD, Aux, Tuner, and Chime are dual RCA jack and has a stereo to mono converter.



RCA plug connector

● Line out & Record out Connection

XLR and RCA jacks are provided for Line out. Connect for the jack that matches your equipment. Record out is for the demand of recording. Connect it to the input of the recorder.

7. Specification

Model	QSM-60V
Type	Pre-Mixer Amplifier
Power Source	AC 115V/230V 50/60 Hz, DC 24V
Frequency Response	20Hz ~ 20KHz
Total Harmonic Distortion	$\leq 1\%$ @ 1KHZ
Input Sensitivity	MIC 1 ~5: 1mV @600 Ω , Balanced (with Phantom power switch) AUX 1 ~3: 150mV @1K Ω , Unbalanced CD: 150mV @1K Ω , Unbalanced Tuner: 150mV @1K Ω , Unbalanced Chime: 1 V @10K Ω , Unbalanced
Output Sensitivity	Line Out: 1V @100 Ω , Balanced Record Out: 1V @100 Ω , Unbalanced
Mute Priority	Chime, MIC 1, MIC 2.
Tone Control	Bass 100HZ +/- 10 db Treble 10KHZ +/- 10 dB
Power Consumption	AC 9.5W @ Rated Power DC 1A @ Rated Power
Dimension	44(H) x 483(W) x 185(D) mm
Weight	4 kgs
Mounting	19" rack